

PETITION FOR RECONSIDERATION

PURSUANT TO SECTION 307 OF THE CLEAN AIR ACT 42 U.S.C. § 7607

To the United States Environmental Protection Agency For Reconsideration of the Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule), Revisions to Acid Rain Program and the Revisions to the Nox SIP Call.

Submitted by the State of North Carolina

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UNITED STATES OF AMERICA
ENVIRONMENTAL PROTECTION AGENCY

Rule to Reduce Interstate Transport of Fine)
Particulate Matter and Ozone (Clean Air) OAR-2003-0053
Interstate Rule); Revisions to Acid Rain)
Program; Revisions to the NO_x SIP Call)

PETITION FOR RECONSIDERATION
BY THE STATE OF NORTH CAROLINA

Pursuant to section 307 of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. § 7607, the State of North Carolina ("State"), through the undersigned counsel, files this Petition for Reconsideration and requests that the Administrator convene a proceeding to reconsider the above-captioned rule (hereinafter "*Final Rule*"). In support of this Petition, the State shows the following:

INTRODUCTION

In general, the State supports the Clean Air Interstate Rule ("CAIR"). EPA correctly determined that upwind reductions are needed to address ozone and fine particulate matter levels across the region - including North Carolina. The quantity of the mandated reductions is fair, supported by the record, technically feasible, and can be accomplished well within the scheduled deadlines. However, the State submits this petition to address significant aspects of the *Final Rule*, which requires the Administrator to "convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." 42 U.S.C. § 7606(d)(7)(B).

In 2002, the Governor signed the State's Clean Smokestacks Act. 2002 N.C. Sess. L. 4. That landmark law, enacted prior to the CAIR proposal, requires dramatic reductions in NO_x and

SO₂ emissions from the fourteen largest electric generating units ("EGU") in the state of North Carolina. The law also directed the State to seek similar reductions on a similar time schedule from sources in other states whose emissions degrade North Carolina's air quality. *Id.* § 10. The CAIR goes a long way toward accomplishing that goal. The grounds discussed below, as well as the arguments the State intends to bring forward on judicial review, are designed to further that goal.

GROUND FOR RECONSIDERATION

I. EPA ANNOUNCED IN THE *FINAL RULE* A NEW AND UNLAWFULLY ARBITRARY INTERPRETATION OF THE "INTERFERE WITH MAINTENANCE" PRONG OF SECTION 110(a)(2)(D)(i)(I).

The familiar language of section 110(a)(2)(D) of the Act requires that state implementation plans ("SIPs") contain provisions prohibiting "any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard." 42 U.S.C. § 7410(a)(2)(D). By its own terms, the section contains two independent grounds for requiring SIP conditions. Significantly, these grounds are joined in the disjunctive: "contribute significantly to nonattainment in, *or* interfere with maintenance by" (Emphasis added.)

Contrary to this clear mandate, EPA concluded in the *Final Rule* that the "interfere with maintenance" prong cannot be used to mandate SIP revisions by an upwind state unless that state already is within the scope of CAIR through the "contribute significantly" prong. *Final Rule*, 70 Fed. Reg. at 25,192-95. The purpose of the "interfere with maintenance" language, according to EPA, is *only* to justify further a mandate to states that are already obliged under section

110(a)(2)(D) to control interstate contributions. *Id.* EPA never applied the “interfere with maintenance” standard independently of the “significant contribution” prong.¹ This interpretation effectively and unlawfully eviscerates the “interfere with maintenance” test.

More importantly, EPA never suggested anywhere in the CAIR proposal that it intended to interpret the statute in this way. *Rule to Reduce Interstate Transport of Fine Particulate Matter & Ozone*, 69 Fed. Reg. 4566, 4579 col. 3 (January 30, 2004) (indicating that the proposal “relies on” the “contribute significantly” standard but not mentioning “interfere with maintenance”) (hereinafter “*Proposed Rule*”). In fact, the “interfere with maintenance” rubric of section 110(a)(2)(D) is not even mentioned, much less discussed, in the *Proposed Rule*.² See,

¹ In response to the *Proposed Rule*, North Carolina timely submitted as part of its comments its *Petition Pursuant to Section 126 of the Clean Air Act, 42 U.S.C. § 7426 to the United States Environmental Protection Agency for Relief from Certain Emissions From Large Electric Generating Units in the Following States: Alabama, etc.* (18 March 2004) (hereinafter “*NC 126 Petition*”) (Docket No. OAR 2003-0053-0731). In this comment, North Carolina showed that six areas in the state were not then attaining the national ambient air quality standard (“NAAQS”) for ozone, and nine other counties had current design values that attained the NAAQS but were within ten percent of the standard. *Id.* at 11-12. The *NC 126 Petition* then indicated that EPA modeling (that EPA itself used to support the *Proposed Rule*) had projected that in 2010, Mecklenburg County would still be nonattainment for ozone, and six counties would remain within ten percent of the standard.

² The EPA did not include this new, unlawful, and arbitrary interpretation of the statutory phrase “interfere with maintenance” in the proposed rule. This novel approach was first introduced in the final rule and therefore the grounds to comment and object arose only after the period for public comment, but within the time specified for judicial review. Through this new statutory interpretation, EPA does more than subjugate the “interfere with maintenance” provision to the “significant contribution” provision. Under this paradigm, the “significant contribution” becomes a condition precedent to the “interfere with maintenance” provision. Since the proposed rule contained no notice of EPA’s intention to re-interpret this statutory provision, North Carolina could not reasonably have been expected to raise the issue before now. See *National Ass’n of Mfrs v. United States DOI*, 134 F.3d 1095, 1105 (D.C. Cir. 1998) citing *Recreation Vehicle Indus. Ass’n v. EPA*, 653 F.2d 562, 568 (D.C. Cir. 1981). Even if EPA had noticed its intention to re-interpret this statutory provision [which it did not], there would have been no reason (i.e. impracticable) to comment on the issue because under the *Proposed Rule* the EPA found that Mecklenburg County would be in nonattainment in 2010. However, as a result of this new interpretation and revised modeling, the EPA reversed its earlier proposal and found, in the *Final Rule*, that Mecklenburg County would be in attainment in 2010. Suddenly and without prior notice or warning North Carolina was no longer considered a downwind area and received no relief under the rule. Because this revision of the “interfere with maintenance” provision significantly alters CAIR’s regulatory scheme as applied to North Carolina, reconsideration of this issue is necessary. See *Kennecott Utah Copper Corp. v. Department of Interior*, 88 F.3d 1191, 1227 (D.C. Cir. 1996). See also, EPA’s interpretation - which contravenes the plain language of the Clean Act and resulted in upwind sources in Georgia, Maryland, South Carolina, Tennessee, and Virginia being found to not contribute to ozone nonattainment in North Carolina (see also footnote 7), is arbitrary and capricious and is without question of central relevance to the outcome of the rule.

e.g., *id.* at 4573 col. 2 (“Under section 110(a)(2)(D) a SIP must contain adequate provisions prohibiting sources in the State from emitting air pollutants in amounts that will contribute significantly to nonattainment in one or more downwind States.”) The reinterpretation of the application of the “interfere with maintenance” prong was raised for the first time only in the *Final Rule*. Thus, it is an appropriate cause for reconsideration.

In the *Final Rule* EPA acknowledges its interpretive change and break from the statute. In its response to comments on the *Proposed Rule* EPA attempts to gloss over this departure:

As stated in the preamble to the final rule, we are not reading the maintenance provision in section 110(a)(2)(D) to separately identify upwind States subject to CAIR. Put another way, we are not giving the ‘interfere with maintenance’ requirement greater weight than the significant contribution requirement (since such a reading would give greater weight to the potentially lesser environmental effect). Cf. 63 FR at 57379 ([NO_x] SIP Call) where EPA interpreted the “interfere with maintenance” statutory requirement “much the same as the term ‘contribute significantly’”, that is, “through the same weight-of-evidence approach.” However, as stated in the Preamble and other comment responses, the CAIR controls can be justified by the need to prevent interference with maintenance of the standards by the same nonattainment downwind receptors.

EPA, *Response to Significant Public Comments on the Proposed Clean Air Interstate Rule* at 63 (March 2005) (“*Response to Comments*”).

This attempt to reconcile the agency’s prior interpretation of this statutory provision with its *Final Rule* interpretation is readily dismissed by a review of the NO_x SIP Call rule. In EPA’s *Finding of Significant Contribution & Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone*, 63 Fed. Reg. 57,356 (27 Oct. 1998) (“*NO_x SIP Call*”), the agency stated:

The EPA has analyzed the “interfere-with-maintenance” issue for the 8-hour NAAQS by examining areas whose current air quality is monitored as attaining the 8-hour NAAQS [or which have no current air quality monitoring], but for

which air quality modeling shows nonattainment in the year 2007. This result is projected to occur, notwithstanding the imposition of certain controls required under the CAA, because of projected increases in emissions due to growth in emissions generating activity.

Id. at 57,379 col. 3. This application of “interfere with maintenance” is not the same as EPA’s unlawfully restrictive reading in the *Final Rule*. In the *NO_x SIP Call*, EPA did not in any way subjugate “interfere with maintenance” to the “significant contribution” test. While it is true that in the *NO_x SIP Call* EPA used the “weight of evidence” approach to determine upwind-downwind linkages for both tests, *see NO_x SIP Call*, 63 Fed. Reg. at 57,379 col. 3, it is a *non sequitur* to infer from this that EPA has ever, before now, interpreted the “interfere with maintenance” standard as a mere adjunct to the “contribute significantly” test. The fact that EPA even adopted an approach at all for evaluating the strength of upwind-downwind linkages demonstrates that - as Congress clearly intended - the “interfere with maintenance” test did have independent life in the *NO_x SIP Call*. In contrast, under EPA’s *Final Rule* interpretation, the “interfere with maintenance” test would never be applied until the linkage is already established, so there would never be a reason to assess a linkage under the “weight of evidence” standard.

EPA also sought to justify this new interpretation on the ground that it could “not giv[e] the ‘interfere with maintenance’ requirement greater weight than the significant contribution requirement (since such a reading would give greater weight to the potentially lesser environmental effect)” *Response to Comments* at 63. The State has difficulty understanding if this means EPA does not believe that the “interfere with maintenance” test should result in more areas qualifying as downwind receptors because the problems faced by these areas are, according to EPA, less severe than those in nonattainment areas. Regardless of the merit of

EPA's characterization, and putting aside the fallacy of EPA's assertion that "such a reading would give greater weight to the potentially lesser environmental effect,"³ Congress has already adjudged that upwind contributors must stem their emissions so as to not "interfere with [downwind] maintenance . . ." EPA is not free to second-guess Congress.

Under EPA's restrictive interpretation, States such as North Carolina, which had no projected future ozone nonattainment as of 2010 (at least as far as EPA's modeling showed) were excluded from "interfere with maintenance" analysis entirely. The only context in which EPA applied this test was in its demonstration that the 2015 reductions in upwind states would be necessary to assist downwind states for which EPA projected nonattainment. To apply this test in one context and not another, without a rational explanation, is by definition arbitrary and unlawful. This is especially so considering that EPA's practice, as indicated by the *NO_x SIP Call*, is to apply the "interfere with maintenance" prong of section 110(a)(2)(D) alongside the "significant contribution" test.

Had EPA correctly applied the statute, North Carolina would be a downwind "interfere with maintenance" state even if it were not viewed as a "contribute to nonattainment" state. In the *Final Rule*, EPA stated its interpretation of the "interfere with maintenance" standard (albeit as applied unlawfully only to "significant contribution" areas) as follows:

Even if all ozone nonattainment areas in the CAIR region could achieve reductions sufficient to meet the level of the 8-hour ozone standard in 2009 based on local controls, 2009 CAIR NO_x reductions, and existing programs, we believe that numerous downwind receptor areas would remain close enough to the

³ EPA's own application of the "interfere with maintenance" test confirms that neither prong is accorded greater weight. The upwind-downwind linkage determination under both the "interfere with maintenance" test and "contribute significantly" test is the same "weight of evidence" approach to which EPA refers. The remedy under each is the same also. The State fails to understand how either prong is accorded "greater weight" than the other under these standards.

standard to be at risk of falling back into nonattainment for the reasons discussed below.

* * *

First, it is highly unlikely that the receptor areas will be able to attain by a wide margin. This is primarily because many of those areas will need substantial emissions reductions merely to attain. This is supported by modeling showing that in the 2010 base case, 30 percent of the receptors are projected to be in nonattainment by the wide margin of 6 ppb or more, indicating the steep emissions reductions necessary just to come into attainment. Table VI-12. We recognize that, unlike the trend in key PM receptor areas, our modeling projects that the ozone levels in ozone receptor areas will improve somewhat between 2010 and 2015 due chiefly to downward trends in NO_x emissions projected under existing requirements. Nonetheless, as shown in detail in the Response to Comments, the projected improvements in ozone levels in the receptor areas are less (often considerably less) than historic variability in monitored 8-hour ozone design values from one three year period to the next. We believe this variability is mostly attributable to changing weather conditions (which significantly affect the rate at which ozone is formed in the atmosphere and movement of ozone after it is formed), rather than variability in the emissions inventory.

Final Rule, 70 Fed. Reg. at 25,195 col. 2-3 (footnotes omitted).⁴ In a footnote, EPA made this further refinement:

We recognize that in the absence of substantial evidence, variability alone would not be a sufficient basis for applying the “interfere with maintenance” prong of section 110(a)(2)(D). Here, however, where there is a substantial body of historical data documenting the variability in ozone concentrations, we believe it is appropriate to consider variability in determining whether emission reductions from upwind states are necessary to prevent interference with

⁴ Previously, EPA also had reiterated more familiar language from the *NO_x SIP Call*.

[W]e believe the “interfere with maintenance” prong may come into play only in circumstances where EPA or the State can reasonably determine or project, based on available data, that an area in a downwind state will achieve attainment, but due to emissions growth or other relevant factors is likely to fall back into nonattainment.

Final Rule, 70 Fed. Reg. 25,193 col. 1 n.45. The *NO_x SIP Call* test required that “air quality modeling show[] nonattainment in the [out] year” *NO_x SIP Call*, 63 Fed. Reg. at 57,379 col. 3. In the *Final Rule*, EPA softened the standard by not mandating a modeling projection, but instead requiring only that “EPA or the State ... reasonably determine or project” that the area is “likely to fall back into nonattainment” (all emphasis added).

maintenance of the ozone standard in downwind states.

Id. at 25,195 n.50. The standard can be summarized as follows: “[W]here there is a substantial body of historical data documenting the variability in ozone concentrations,” “it is appropriate to consider variability in determining whether emission reductions from upwind states are necessary to prevent interference with maintenance of the ozone standard in downwind states.”

EPA’s modeling projects that all areas of North Carolina will attain the ozone standard by 2010. However, EPA’s own data – the very data that it used for its “historic variability” analysis for downwind “contribute significantly” areas – shows that areas of North Carolina will attain by margins that are within the “historic variability.” Based on this analysis, North Carolina will have legally cognizable “maintenance” issues under section 110(a)(2)(D).

The case of Mecklenburg County, North Carolina makes the point. EPA projects that in 2010⁵ this county in the Charlotte metropolitan area will have a design value of 82.5 ppb.

Technical Support Document for the Final Clean Air Interstate Rule: Air Quality Modeling at Appx. E, Table E-1 (March 2005) (hereinafter “*Modeling TSD*”). EPA’s data for Mecklenburg show the following historic three-year design values:

	<u>1982</u>	<u>'83</u>	<u>'84</u>	<u>'85</u>	<u>'86</u>	<u>'87</u>	<u>'88</u>	<u>'89</u>	<u>'90</u>	<u>'91</u>				
Design Value (ppb)	100	99	97	98	94	102	112	104	101	92				
(Cont'd)	<u>'92</u>	<u>'93</u>	<u>'94</u>	<u>'95</u>	<u>'96</u>	<u>'97</u>	<u>'98</u>	<u>'99</u>	<u>'00</u>	<u>'01</u>	<u>'02</u>	<u>'03</u>		
Des. Val.	91	91	92	94	94	97	103	104	104	101	102	98		

⁵ In the *Proposed Rule* EPA indicated that whether an area is a downwind receptor, and thus can support a finding of “significant contribution” was determined by the area’s air quality condition in 2010. *Proposed Rule*, 69 Fed. Reg. 4593 col. 1, 5600 col. 1. In EPA’s revised modeling for the *Final Rule*, EPA again used year 2010 modeling to support findings of significant contribution. See *Modeling TSD* at 21, 26-40. Accordingly, it is appropriate to use 2010 data to determine whether a receptor falls within the “interfere with maintenance” language in section 110(a)(2)(D).

Response to Comments at 1041. The data show significant historical variability in the design values for Mecklenburg. On four separate occasions the design value rose by at least three parts per billion ("ppb") from one year to the next, including huge leaps of eight and ten ppb in consecutive years (1986 to 1988). From 1996 to 1999, the design value jumped by a total of ten ppb. There is no doubt that year-to-year variability of three ppb is historically demonstrated for Mecklenburg County. Indeed, EPA unqualifiedly concluded for all areas that "historical data indicates that attaining counties with air quality levels within 3 ppb of the standard are at risk of returning to nonattainment." *Response to Comments* at 148; *see also id.* at 60.

Even further, "The information also indicates that even if CAIR receptors were . . . 3-5 ppb below the standard, they would have a *reasonable likelihood* of returning to nonattainment." *Id.* (emphasis added). EPA projects that *even with CAIR level controls in all relevant upwind states*, the design value for Mecklenburg will remain within five ppb of the NAAQS in 2010. EPA's modeling also indicates that in 2010, Rowan County will be within five ppb of the ozone NAAQS. *Modeling TSD* at Appx. E, Table E-1. Hence, according to EPA's own data and criteria, both Mecklenburg and Rowan counties "have a reasonable likelihood of returning to nonattainment," *Response to Comments* at 148, and are "maintenance" areas within the meaning of section 110(a)(2)(D).⁶ *See Response to Comments* at 60; *see also, e.g., id.* at 141 n.31 ("[A]nalytical uncertainties leave some question as to whether an area projected to attain in a given future year actually will attain in that year").

⁶ For Wake County, EPA projects a 2010 design value of 77.5 ppb. *Id.* Twice during the period from 1987 to the present the three-year average for Wake County has risen by eight ppb from one year to the next. From 1987 to 1988, the design value rose from 92 to 104 ppb, and from 1998 to 1999 it jumped from 93 to 101 ppb. *Response to Comments* at 1041. Such an annual jump from the 2010 projection would put Wake in nonattainment as well.

EPA had already established in its *Proposed Rule* that upwind sources in Georgia, Maryland, South Carolina, Tennessee, and Virginia contribute significantly to ozone pollution in North Carolina. *Proposed Rule*, 69 Fed. Reg. at 4603. Despite these findings, EPA abandoned the clear statutory language which gives equal weight to both the “interfere with maintenance” provision and the “contribute significantly” provision. Instead it devised a statutory interpretation that requires states be found to “contribute significantly” before considering the “interfere with maintenance” provision. As a result of this illegal interpretation, sources located in Georgia, Maryland, South Carolina, Tennessee, and Virginia which are clearly “interfering with maintenance” in North Carolina were dropped from the rule.⁷

Because EPA’s own data show that North Carolina is undoubtedly home to “maintenance” areas within the meaning of section 110(a)(2)(D), the State requests that EPA reconsider this part of the *Final Rule*. The State asks that EPA adopt and apply the interpretation the Act that Congress plainly commanded, analyze any receptors that may qualify as maintenance areas under section 110(a)(2)(D), and conclude, based on the record before it, that the five above-

⁷ Sources in Maryland, South Carolina, Tennessee, and Virginia already are included in the summer ozone budget aspect of the rule due to their significant contributions to ozone nonattainment in other states. Georgia was originally within the scope of the CAIR program, but was dropped from the reach of the *Final Rule* due to EPA’s finding that all nonattainment to which sources in Georgia contributed would be remedied by 2010 without new restrictions under section 110(a)(2)(D). Georgia should have been included under the “interfere with maintenance” prong. The exclusion of Georgia from the *Final Rule* is of no small moment considering that, unlike any other state subject to the CAIR summertime ozone program, parts of Georgia were ordered to be included in the summertime *NO_x SIP Call* program, but appear on the verge of escaping entirely the *NO_x SIP Call*’s summertime budget program as well, due to inexplicable and lengthy delays in EPA’s *NO_x SIP Call* phase two rulemaking process. See *Stay of the Findings of Significant Contribution & Rulemaking for Georgia for Purposes of Reducing Ozone Interstate Transport*, 70 Fed. Reg. 9897 (1 March 2005) (documenting over two-year delay in finalizing rule). Thus, despite sources in Georgia being a major contributor to ambient summertime *NO_x* in the southeast, such sources would not be subject to a summertime *NO_x* budget under either the *NO_x SIP Call* or CAIR. The exclusion of Georgia from the CAIR ozone control region is even more troubling considering that EPA has initiated a new rulemaking to ensure the inclusion of New Jersey and Delaware in the *PM_{2.5}* control region despite the fact that those two states, like Georgia, were included in the rule based on the modeling supporting the *Proposed Rule*, but then excluded under the record for the *Final Rule*. See *Inclusion of Delaware and New Jersey in the Clean Air Interstate Rule; Proposed*, 70 Fed. Reg. 25,408 (12 May 2005).

named states "interfere with maintenance" of the ozone standard in North Carolina.⁸

II. THE EPA IMPROPERLY EXCLUDED AS DOWNWIND RECEPTORS AREAS IN NORTH CAROLINA THAT ARE CURRENTLY NOT ATTAINING THE NATIONAL AMBIENT AIR QUALITY STANDARDS.

The Clean Air Act quite simply requires that each state's implementation plan "shall ... contain adequate provisions ... prohibiting ... any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will ... contribute significantly to nonattainment in, or interfere with maintenance by, any other State" 42 U.S.C. § 7410(a)(2)(D). In North Carolina, at the time the CAIR was proposed, at the time the CAIR was finalized, and on the day this petition was filed, the air in certain areas was not and is not attaining the NAAQS for ozone and/or fine particulate. Emissions from sources within other states contribute significantly to this condition. Such emissions must be controlled, as those emissions without a doubt "will ... contribute significantly to nonattainment in" North Carolina.

The EPA erred by not considering which areas were currently not attaining the standard. According to the agency, current nonattainment, as shown by actual air quality monitoring data is not determinative. Instead, EPA relied only on projections of nonattainment six years out (2010). This was improper.⁹

⁸ Should EPA conclude at any time that no monitors in North Carolina are nonattaining under the fine particulate standard, EPA must also assess whether any areas are downwind "maintenance" areas under the "historic variability" test.

⁹ In its comments on the *Proposed Rule*, the State noted that "[a] petition may be granted so long as out-of-state sources contribute significantly to current downwind nonattainment." *Petition Pursuant to Section 126 of the Clean Air Act, 42 U.S.C. § 7426 to the United States Environmental Protection Agency for Relief from Certain Emissions From Large Electric Generating Units in the Following States: Alabama, etc.* at 10 (18 March 2004) (hereinafter "*NC 126 Petition*") (Docket No. OAR 2003-0053-0731). We raise the issue here out of an abundance of caution and to complete the record on this significant question of statutory interpretation. However, as with the points raised in Section I of this petition, the question of current nonattainment discussed here held little significance for the State under the *Proposed Rule* because EPA had indicated that it would include the State as a downwind receptor for ozone based on the projected future nonattainment of the Mecklenburg area. Therefore it was impractical to submit comments on this aspect of the

As discussed above, in the *Proposed Rule* and the accompanying technical support documents, EPA indicated that sources in Georgia, Maryland, South Carolina, Tennessee, and Virginia all were projected to contribute significantly to ozone nonattainment in Mecklenburg County (Charlotte) in 2010. The contributions to Mecklenburg from these states qualified as "significant"¹⁰ after evaluating all the relevant air quality metrics. EPA made this finding by determining a relatively current emissions inventory for each state, "growing" that inventory to estimate state-by-state emissions in 2010, feeding those 2010 emissions projections into an air quality model, and quantitatively and qualitatively evaluating the results of various model runs using various metrics. *Proposed Rule*, 69 Fed. Reg. 4566.

In the *Final Rule*, EPA updated its modeling and its data projections. It then concluded that Mecklenburg County would attain the ozone standard as the area would achieve a projected design value of 82.5 ppb in 2010. *Modeling TSD* at Appx. E, E-1. This, according to EPA, eliminated the State's only projected future ozone nonattainment area and allowed EPA to discount the State as a downwind receptor for determining which sources contributed significantly to which nonattaining monitors. *Final Rule*, 70 Fed. Reg. 25162.

However, EPA's premise is faulty. The plain language of the statute dictates a different interpretation. EPA admitted so in the *NO_x SIP Call*:

rule. It was not until the *Final Rule* that other bases for upwind-downwind linkages took on a "new significance." *Kennecott Utah Copper Corp. v. Dept. of Interior*, 88 F.3d 1191, 1227 (D.C. Cir. 1996). EPA's interpretation which relies exclusively on predicted ambient concentration and ignores current air quality - and its concomitant health impacts - is contrary to Congressional intent, arbitrary and capricious, and of central relevance to the outcome of the *Final Rule*.

¹⁰ Throughout this discussion, the term "significant contribution" is intended to mean such contribution before considering the "cost effectiveness" component. Controls for sources contributing to nonattainment in North Carolina would be cost effective. EPA concluded as much in the *Proposed Rule*. 69 Fed. Reg. 4566. There is nothing in the *Final Rule* that indicates that adding North Carolina to the list of downwind states would "break the bank" on cost effectiveness.

[S]ection 110(a)(2)(D)(i)(I) requires the SIP to prohibit amounts of emissions "which *will* contribute significantly * * *" (emphasis added). The EPA believes that the term "will" means that SIPs are required to eliminate the appropriate amounts of emissions that *presently*, or that are expected in the future, *contribute significantly to nonattainment downwind*."

NO_x SIP Call, 63 Fed. Reg. at 57,375 col. 3 (2d and 3d emphases added). Importantly, EPA did not suggest in the *NO_x SIP Call* that the word "will" raised some ambiguity that it was permitted to resolve. That is, EPA did not invoke *Chevron* deference. Instead, EPA stated without qualification that "'will' means that SIPs are required to eliminate the appropriate amounts of emissions that presently ... contribute significantly to nonattainment downwind." EPA has never disavowed this interpretation.¹¹

To be sure, the verb form of "will" does indicate future, but it also indicates certainty. See *Webster's II New College Dictionary* 1263 (Houghton Mifflin Co. 1999) ("will ... 1. Simple futurity ... 2. Likelihood or certainty") The fact that a set of sources upwind of Mecklenburg contributes significantly to nonattainment currently is on its face more certain to occur than a significant contribution to that same nonattainment five years from now. The same holds for any area by virtue of the self-evident premise that any confluence of facts becomes more difficult to predict the farther in the future one seeks to predict it. "Over longer time spans projections become increasingly uncertain" *Response to Comments* at 139.

This interpretation that section 110(a)(2)(D) was written to address current non-attainment and not just future predicted non-attainment is consistent with and confirmed by its statutory companion: section 126. Section 126 regulates "any major source or group of

¹¹ In the *NO_x SIP Call*, EPA also unlawfully failed to recognize current nonattainment when assessing upwind-downwind linkages. See *NO_x SIP Call*, 63 Fed. Reg. at 57,375 col. 1-2. The fact that the agency has now twice violated the Act does not validate its actions or change the plain text of the statute.

stationary sources [that] *emits or would emit* any air pollutant in violation of the prohibition of section 110(a)(2)(D)([i])” 42 U.S.C. § 7426(b) (emphasis added); *see Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1041-44 (D.C. Cir. 2001). This incorporates the word “will” but also plainly applies to sources that currently “emit.” It would be an anathema to public health to interpret these statutory provisions to ignore current nonattainment air quality only to turn around and, on the basis of 10 to 15 year predictions, prohibit future emissions. Moreover, although North Carolina expects current non-attainment areas to be redesignated as attainment, there will be continuing maintenance obligations that must be satisfied. In order to ensure that these maintenance obligations are not in vain, it is important to require downwind states to eliminate their significant contribution to its airshed.

Of particular concern is EPA’s response to several commenters who argued that the 2015 reductions would no longer be necessary if the downwind receptor was projected to attain after 2010 but before 2015. EPA rejected these arguments in part on the ground that the 2015 budget, and not the 2010 budget, is the CAIR remedy, but also in part on the basis that such areas would still fall within the “interfere with maintenance” prong of section 110(a)(2)(D). *See Response to Comments*. That is, an area that is predicted to be nonattainment remains entitled to a remedy even if the remedy post-dates the date on which the area is predicted to achieve attainment. As EPA cogently summarized, “Even if all ozone nonattainment areas in the CAIR region could achieve reductions sufficient to meet the level of the 8-hour ozone standard in 2009 based on local controls, 2009 CAIR NO_x reductions, and existing programs, we believe that numerous downwind receptor areas would remain close enough to the standard to be at risk of falling back into nonattainment” *Final Rule*, 70 Fed. Reg. at 25,195 col. 2 (footnote omitted).

Mecklenburg and several other North Carolina areas are currently nonattainment but “could achieve reductions sufficient to meet the level of the 8-hour ozone standard in 2009 based on local controls, 2009 CAIR NO_x reductions, and existing programs.” However, some of these “downwind receptor areas would remain close enough to the standard to be at risk of falling back into nonattainment” Citizens in these areas are entitled to a remedy. EPA’s refusal to recognize the current nonattainment areas within North Carolina and thus exclude North Carolina as a downwind ozone receptor is arbitrary.

It is important to note that EPA’s new projection that Mecklenburg County will attain the NAAQS by 2010 is in large measure due to the State’s proactive legislation to reduce emissions from EGUs, discussed above. By this *Final Rule*, North Carolina is being punished for taking the initiative to clean its own air.¹²

There is no dispute in the record that several areas of the State are not now attaining the NAAQS. In its comments, the State submitted that monitors in the following areas are not attaining: Charlotte-Gastonia-Rock Hill, Cumberland County, Edgecombe County, Great Smoky Mountains National Park/Haywood County, Greensboro-Winston-Salem-High Point, Hickory-Morganton, Raleigh-Durham-Chapel Hill.¹³ The State’s most current data indicates that these monitors remain in nonattainment.

The record also demonstrates that sources in upwind states are contributing significantly

¹² For example, this new projection may also be due in part to adjustment of Tennessee’s NO_x emissions downward by 23 percent. See EPA, *Clean Air Interstate Rule: Emissions Inventory Technical Support Document* (4 March 2005) (“*Emissions TSD*”).

¹³ Nineteen whole or partial counties were designated by EPA as nonattainment areas effective 15 June 2004, *8-Hour Ozone National Ambient Air Quality Standards*, 69 Fed. Reg. 23,858 (30 April 2004); 40 C.F.R. § 81.334. The nonattainment designation was deferred for thirteen whole or partial counties, as these areas have elected to adopt Early Action Compacts. *Id.*

to this nonattainment. In the *Modeling TSD* for the *Proposed Rule*, EPA concluded that emissions from five states contributed significantly to ozone nonattainment in North Carolina: Georgia, Maryland, South Carolina, Tennessee, and Virginia. For these states, the total NO_x emissions that supported the finding of significant contribution (*i.e.* 2010 emissions projections) was about 1.92 million tons. See *Modeling TSD*. In the *Final Rule*, EPA indicated that total 2001 emissions from these states was 2.42 million tons, and this total was projected to decrease to about 1.74 tons in 2010. A straight-line extrapolation shows 2005, *i.e.* current, emissions to be approximately 2.12 million tons, which is well above the 1.92 million tons that EPA already had determined to be significant. If 1.92 million tons of NO_x emissions were found to be significant in the *Proposed Rule*, certainly 2.12 is significant now.¹⁴

Therefore, emissions from the five states identified in the *Modeling TSD* contribute significantly to current nonattainment in North Carolina. EPA must reconsider this aspect of the rule.

III. EPA'S DECISION TO USE 0.2 µg/m³ AS THE THRESHOLD FOR PARTICULATE MATTER CONTRIBUTIONS WAS ARBITRARY BECAUSE THE LOGIC EQUALLY SUPPORTS A THRESHOLD OF 0.1 µg/m³.

In the *Proposed Rule*, EPA proposed that the appropriate threshold for significant contribution for the PM_{2.5} aspect of CAIR would be 0.15 µg/m³. The *Final Rule* saw this level rise to 0.2 µg/m³. EPA's stated basis for this upward shift is nonsensical and should be

¹⁴ The State understands that determinations of significant contribution must be made on a state-by-state basis. The calculations based on total emissions for the five states are only illustrative. For all states except Tennessee, the approximate 2005 NO_x emissions level significantly exceeded (by at least ten percent for each state) the emissions in the *Modeling TSD* that EPA found contributed significantly to nonattainment in North Carolina. Tennessee's approximate 2005 emissions are less than four percent lower than the level found to cause a significant contribution. In addition, a straight line extrapolation might not be entirely accurate. But it is a reasonable extrapolation from the best available data in the record. However, even if estimated 2005 emissions were to be slightly below the level EPA found to cause a significant contribution, this does not mean that such emissions are not significant.

reconsidered.¹⁵

EPA's only grounds for the $0.2 \mu\text{g}/\text{m}^3$ threshold is that, considering the precision of $\text{PM}_{2.5}$ monitoring and modeling, "the precision of the threshold should not exceed that of the NAAQS." *Final Rule*, 70 Fed. Reg. at 25,191 col. 2. Because the NAAQS has only one significant digit, then the contribution threshold should be rounded to "the nearest single digit corresponding to about 1% of the $\text{PM}_{2.5}$ annual NAAQS," yielding a threshold of $0.2 \mu\text{g}/\text{m}^3$. *Id.*

The selection of this threshold is arbitrary for two reasons. First, this logic equally supports a contribution threshold of $0.1 \mu\text{g}/\text{m}^3$. Nowhere does EPA explain why it rounded up $0.05 \mu\text{g}/\text{m}^3$ instead of rounding down by the same margin.

Second, under EPA's new threshold "any model result that is below this value (0.19 or less) indicates a lack of significant contribution" *Id.* However, EPA does not reconcile the fact that for determining the threshold it is acceptable to round $0.15 \mu\text{g}/\text{m}^3$ up to $0.2 \mu\text{g}/\text{m}^3$, but for determining significant contribution, nothing below $0.19 \mu\text{g}/\text{m}^3$ can be rounded up to $0.2 \mu\text{g}/\text{m}^3$. If $0.15 \mu\text{g}/\text{m}^3$ can be rounded to $0.2 \mu\text{g}/\text{m}^3$ for determination of the standard, it is irrational that $0.15 \mu\text{g}/\text{m}^3$ cannot be rounded up to $0.2 \mu\text{g}/\text{m}^3$ for comparison to that very threshold.

EPA should reconsider the threshold level for determination of significant contribution under the $\text{PM}_{2.5}$ NAAQS. If EPA insists on rounding in order keep the precision of the threshold

¹⁵ The new significance threshold of $0.2 \mu\text{g}/\text{m}^3$ was first introduced at part of the Final Rule. The Proposed rule evaluated the threshold at 0.15 and $0.10 \mu\text{g}/\text{m}^3$. It was impractical for the state to evaluate each and every possible significance level. The public can only comment in a meaningful way on the analysis EPA provides. If the EPA had properly evaluated the impact of a $0.2 \mu\text{g}/\text{m}^3$ significance level on emission budgets ambient concentrations the State could have provided relevant and meaningful comment. To simply request general comments on an infinite number of possible significance levels is illusory and requires reconsideration on this critical issue. The sine qua non of this part of the rule is the significance level and thus EPA's newly minted and as yet unevaluated level of significance is of central relevance to this rule.

consistent with the precision of the NAAQS, the State suggests that EPA consider and adopt the 0.1 $\mu\text{g}/\text{m}^3$ level. Setting the level as such would sweep within the scope of the CAIR states whose sources make a one percent (and slightly lower) contribution, whereas EPA's arbitrary 0.2 $\mu\text{g}/\text{m}^3$ threshold deviates from this policy. Thus, the lower threshold is more consistent with EPA's initial proposal and would fairly implement section 110(a)(2)(D).¹⁶

IV. EPA FAILED TO JUSTIFY, BOTH LEGALLY AND FACTUALLY, ITS DECISION TO ESTABLISH A "COMPLIANCE SUPPLEMENT POOL" FOR THE ANNUAL NO_x PROGRAM, AND THE EPA FAILED TO INVITE COMMENT ON THE SAME.

In the *Final Rule*, EPA concluded that it would include in the annual NO_x program a Compliance Supplement Pool ("CSP") of 200,000 tons of NO_x allowances. EPA did not propose such a plan. It only asked more generally for comment on early reduction incentive programs.¹⁷ Two aspects of the plan, which only became known in the *Final Rule*, require reconsideration.

First, states would be allowed to distribute CSP allowances not only to facilities that reduced emissions early, which was the subject on which EPA solicited comment in the *Proposed Rule*, but also to facilities that allegedly demonstrated a need to for such allowances in order to avoid "undue risk to the reliability of electricity supply" *Final Rule*, 70 Fed. Reg. at 25,351 col. 1. There is no basis for this allowance.

¹⁶ A threshold of 0.1 $\mu\text{g}/\text{m}^3$ would return Illinois and Michigan to North Carolina's airshed for PM_{2.5}. A threshold of 0.15 $\mu\text{g}/\text{m}^3$, which the State supported in its comments to EPA, would include Illinois, but not Michigan.

¹⁷ The EPA did not propose to include a compliance supplement pool in the Proposed Rule and therefore it was not only impractical to raise an objection, but the grounds to raise such an objection arose after the period for public comment. The establishment of the compliance supplement pool for the stated purpose of alleviating concerns associated with achieving the 2009 control levels contradicts directly with EPA's express finding that "sources had sufficient time to install NO_x emission controls." This unexplained contradiction is arbitrary and undoubtedly is of central relevance to the rule as it allows sources to continue to significantly contribute to downwind state's nonattainment.

Throughout the CAIR process, EPA has in detail calculated the quantity of emissions in upwind states that “contribute significantly” to nonattainment in downwind states. The Act demands that these emissions be eliminated. *NO_x SIP Call*, 63 Fed. Reg. at 57,376 col. 2 (“The EPA believes that the term ‘prohibit’ means that SIPs must eliminate those amounts of emissions determined to contribute significantly to nonattainment or interfere with maintenance downwind”). The Act does not leave room for an exception for facilities that may have trouble meeting this requirement, no matter what the type of facility.

In fact, EPA’s methodology for determining “significant contribution” takes this factor into account by definition. In determining the amount by which facilities will need to reduce emissions, EPA considered only control levels that were highly cost effective. EPA also determined that enough labor and materials would be available to implement these controls on the mandated schedule. *Final Rule*, 70 Fed. Reg. 25162. This leaves no room for an after-the-fact compliance exemption.

In discussing the CSP, EPA stated bluntly: “While EPA analysis has shown that sources had sufficient time to install NO_x emission controls, EPA does believe that it would be appropriate to provide some mechanism to alleviate the concerns of some sources which may have unique issues with complying with the 2009 implementation deadline.” *Final Rule*, 70 Fed. Reg. at 25,286 col. 1. The fact that EPA wishes to “alleviate the concerns of some sources” is not a valid basis for a regulatory exemption. Why does EPA not “believe that it would be appropriate ... to alleviate the concerns” of the State regarding the health of its citizens by not allowing such facilities to violate emissions limits generally applicable in the industry? Essentially, EPA developed an emission reduction program that EPA itself determined with

ample record support could be met by all regulated entities in a timely manner, and then just ignored its reasoned conclusions on the ground that "some sources" had "concerns"¹⁸ This aspect of the CSP is unsupported and arbitrary. EPA "cannot at the end of the game simply knock the pieces off the chessboard in the name of unforeseen contingencies and unprecedented emergencies, and still claim that it did not act arbitrarily or capriciously because it played by the rules almost to the end." *North Carolina v. Federal Energy Reg. Comm'n*, 112 F.3d 1175, 1200-01 (D.C. Cir. 1997) (Wald, J., dissenting), *cert. denied*, 522 U.S. 1108 (1998).

Second, the actual regulatory language of the early reduction aspect of the CSP fails to provide adequate guidance. It simply allows for credits to be distributed to any source that "achieves emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable during such years" *Final Rule*, 70 Fed. Reg. at 25,350 col. 3. The *Final Rule* gives no indication how to calculate these "emission reductions" In order for the program to achieve its goal of early reductions, the "emission reductions" must stem from recently installed control equipment and result in long term reductions. Sources should not be permitted to acquire allowances for pre-existing control technologies that were completed and activated prior to the finalization of CAIR. The current text of the *Final Rule* provides insufficient safeguards to achieve its stated purpose and should be reconsidered.¹⁹

¹⁸ EPA also provides no basis for the extent of this exemption. The figure "200,000" is not supported by any analysis.

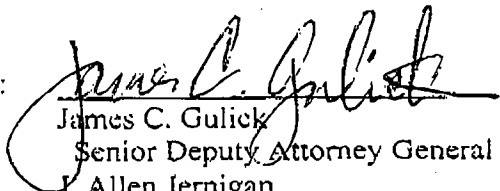
¹⁹ It does not escape notice that North Carolina is one of only two states that is awarded absolutely no allowances under the CSP program. The allowances were distributed in proportion to the quantity of reductions required of each state. Prior to the *Proposed Rule*, North Carolina proactively legislated significant reductions in emissions from EGUs and therefore is predicted to reduce to the CAIR control level even without the CAIR requirement. Thus, the State receives no allowances and the credits it would have received from the 200,000 ton allotment are shifted to its upwind neighbors. In this manner, the CSP punishes states that have acted proactively and rewards states that spur the need for federal regulation. This perverse incentive runs completely counter to the CSP's goal of promoting early reductions. The CSP program is unfair and irrational. To be sure, the State does not ask to be awarded allowances to correct this

CONCLUSION

For all of the foregoing reasons, EPA should convene a proceeding to reconsider the aspects of the *Final Rule* that are set forth above.

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UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF NORTH CAROLINA,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,

Respondent.

No. _____


PETITION FOR REVIEW

Pursuant to Rule 15 of the Federal Rules of Appellate Procedure and section 307(b) of the Clean Air Act, 42 U.S.C. § 7607(b), the State of North Carolina hereby petitions the Court to review the final rule of the United States Environmental Protection Agency entitled "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NOx SIP Call" which was published at 70 Fed. Reg. 25,162 (May 12, 2005) and is to be codified at 40 C.F.R. §§ 51, 72, 73, 74, 77, 78, and 96.

Dated July 8th, 2005.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on the 8th day of July 2005, a copy of the foregoing Petition for Review was sent by U.S. mail, first class postage prepaid, to the following:

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